Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Requested Amendment of the Maritime Service Rules (Part 80) to Impose Minimum Requirements for Digital Selective Calling in Maritime Ship and Coast Station Equipment Sold in the U.S.	)	No. RM-8031

To: The Commission

COMMENTS OF SEA, INC.

SEA, Inc. ("SEA"), by its undersigned attorneys and pursuant to Section 1.405 of the Commission's rules, hereby submits its comments in response to the June 25 Petition for Rulemaking submitted by the U.S. Coast Guard, the filing of which was announced by Public Notice, Report No. 1899, released July 13, 1992.

INTRODUCTION

1. SEA manufactures and markets MF/HF single sideband and is one of only two U.S. manufacturers of VHF FM marine transceivers. We have followed the Coast Guard Petition for Rulemaking concerning minimum requirements for digital selective calling ("DSC") in marine radio equipment with great interest, and have participated regularly in RTCM Special Committee 101 discussions on the petition. We believe that the proposed VHF minimum requirements will greatly enhance safety when the GMDSS

is fully operational in 1999. Furthermore, the groundwork will be laid for the introduction of enhancements such as automated telephone service which will benefit everyone in the marine community. We do, however, have several suggestions that we feel will improve the proposal. These are outlined in the discussion below.

2. We have some reservations about the MF/HF proposal. The proposed requirements for MF/HF are far more extensive than those for VHF. If the addition of DSC requires a vastly more complicated radio or the compromise of other transceiver features, it is not clear that the public interest will be served.

DISCUSSION OF VHF REQUIREMENTS

3. The proposed minimum VHF DSC requirements are fairly modest. The proposal does not require any special displays, nor does it require a dedicated receiver for the DSC channel (Channel 70). So long as this approach is retained in any rulemaking, the requirements can be implemented without great financial impact to mariners. Nonetheless, users of radios equipped as proposed will have sufficient capability to call for aid in an emergency situation and will retain interoperability with GMDSS equipped ships. Furthermore, we believe that the extra features required can be implemented in a way that will be easy for an unskilled and possibly panic-stricken operator to understand and use.

4. There was, however, one omission from the proposal which we believe is important to its success. The DSC reception functions presume that the receiver is tuned to Channel 70. Under current rules (Section 0.148), a watch on Channel 16 or Channel 9 is required when the transceiver is not otherwise engaged. Alternatively, if the radio is equipped with DSC, watch may be kept on Channel 70 in areas where the Coast Guard provides DSC service on VHF. Since the Coast Guard intends to install DSC wherever they have VHF coverage and distress calls may come in from other vessels, the rules should be modified to allow a watch on Channel 70, in lieu of Channel 16 or Channel 9, at any location.

5. The only other comment we have on the VHF proposal concerns the implementation date. While the proposed date is February 1, 1997, the petition requests the Commission to consider an earlier date. Given the amount of time usually required for a rulemkaing process and the time required to design, type accept, and put into production a new radio, we do not believe an earlier date is practical. Furthermore, the petition requests the same deadline for both manufacture and sale of new radios. This does not allow time for dealers and manufacturers to clear their inventory of non-DSC radios in an orderly fashion. We recommend that there be two deadlines: one for manufacture and importation of radios and a later date for installation. These dates should be at least six months apart. This was done in a recent rulemaking on timeout timers for VHF radios.

DISCUSSION OF MF/HF REQUIREMENTS

6. The Coast Guard petition proposes that all MF/HF radiotelephones have Class B DSC capability. The petition states that "DSC should be a standard function on all marine radios." We interpret this to mean that the Coast Guard wants the DSC function to be integral to the radiotelephone, which is problematic. Class B DSC is quite sophisticated requiring the transmission of four different kinds of calls. Each of these calls has message fields with variable information which must be entered from a keypad (or by some other means). If DSC is integrated into the radio, this will require the addition of several new keys, while certain keys already present will have to serve dual functions. To guide the user through the difficult process of composing a message, easily read and understood prompts will be needed on the display (or some other form of output). Six types of calls need to be received and the Class B specification requires that all data in the messages be displayed. This will require a large display if the information is to be understood. All of this reduces front panel space for other vital functions such as the speaker. Internally, a great deal of additional processing power will be required. The necessary high speed logic will exacerbate the problem of interference suppression. To provide all of this will add several hundred dollars to the cost of a new radio. For compulsory ships requiring a Class A installation this expense

will not be offset by any benefit. Furthermore, the operation of the radio will be greatly complicated and performance may be compromised. Our experience is that complicated features are seldom used and consequently do not enhance safety.

7. We agree that in the era of GMDSS, MF/HF radios will require some DSC capability to contact GMDSS ships in an emergency. However, we do not feel that the scope of requirements for an MF/HF installation is much different from that for a VHF installation. Consequently, we believe that the requirements for integral DSC in MF/HF radios should be substantially the same as those for VHF radios. Mariners needing or desiring full Class B capability could use external DSC peripherals. Such equipment is available now. External equipment, by separating the radio functions from the DSC functions and by providing ample front panel space for additional keys and display, makes the implementation of a practical, user-friendly Class B DSC system far more feasible.

CONCLUSION

8. In summary, SEA supports the Coast Guard's proposal for minimum DSC requirements on VHF radiotelephones. We suggest that the rules be modified to allow watchkeeping on Channel 70 for voluntary ships in all areas as an alternative to Channel 16 and Channel 9. We request that when setting an implementation schedule, the Commission consider the need for dealers and

manufacturers to clear inventory of non-DSC models prior to the availability of new radios. SEA supports similar minimum requirements for MF/HF radiotelephones, but does not support the integration of full Class B DSC capability into these radios. Such capability is not needed by many SSB users and can be provided by external equipment where needed.

Respectfully submitted,

SEA, Inc.

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CERTIFICATE OF SERVICE

I, Norma E. Rusnak, do hereby certify that a true and correct copy of the foregoing document, "Comments of SEA, Inc.," was served by First Class United States Mail, postage prepaid, this 12th day of August, 1992.

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